iRA Synergy
— Private Limited —
Nashik, Maharashtra, India

iRA's ECO
CLEANER • GREENER • SMARTER

SUSTAINABLE SOLUTIONS
FOR A BETTER TOMORROW

2-IN-1 DEAD ANIMAL & SOLID WASTE INCINERATOR

ADVANCED ORGANIC WASTE MANAGEMENT SOLUTION



BUILT TO LAST
Robust & durable construction

COST EFFECTIVE
Intelligent control for efficient performance

HIGH EFFICIENT
Advance 5-chamber Technology

AUTOMATIC OPERATION
PLC based system for safe and reliable operation

2-IN-1 DEAD ANIMAL & SOLID WASTE INCINERATOR MACHINE VIEW

FRONT VIEW



BACK VIEW



KEY FEATURES

DUAL PURPOSE
Dead Animal & Solid Waste Disposal

HIGH TEMPERATURE COMBUSTION
(800°C - 1100°C)

DIESEL/GAS BURNER OPTION
Flexible Fuel Operation

PLC BASED AUTOMATIC OPERATION
Smart & Reliable Control

LOW FUEL CONSUMPTION
Built to Withstand Tough Conditions

EASY MAINTAINANCE
User Friendly Design

TECHNICAL SPECIFICATIONS

ABOUT THE PRODUCT

The iRA Synergy 2-IN-1 Incinerator is a state-of-the-art waste management solution engineered for the safe and efficient disposal of dead animals and solid waste. Designed with advanced combustion technology, it ensures complete incineration with minimal emissions, making it an ideal choice for municipalities, industries, and institutions.

Equipped with a high-temperature primary chamber and a secondary chamber for superior combustion, this incinerator effectively reduces waste volume while controlling smoke and harmful gases. Its robust construction, low fuel consumption, and PLC based automatic operation ensure high performance, safety, and durability with low maintenance.

The iRA Synergy 2-IN-1 Incinerator delivers reliability, efficiency, and environmental responsibility in one powerful solution



TECHNICAL SPECIFICATIONS

PARAMETER	DETAILS
Model	AWI - 500
Capacity	50 kg to 3000 kg per day (customizable)
Combustion Chamber	4.5 m (L)
Secondary Chamber	2.5 m (L)
Chimney Height	30.0 meters
Temperature	800°C - 1100°C

PARAMETER	DETAILS
Fuel type	Diesel / Gas / LPG / PNG
Power Supply	380V, 3 Phase, 50Hz
Control System	PLC Automatic
Emission Standard	As per CPCB Norms

HIGH EFFICIENCY

Complete combustion with minimal residue.

LOW EMISSION

Environment friendly incineration with controlled emissions.

AUTOMATIC OPERATION

PLC based system for safe and hassle-free operation.

COST EFFECTIVE

Low fuel consumption and reduced operating costs.

BUILT TO LAST

Robust construction for long service life and reliable performance.

HOW IT WORKS

ADVANCED 5- CHAMBER TECHNOLOGY

1 PRIMARY COMBUSTION CHAMBER

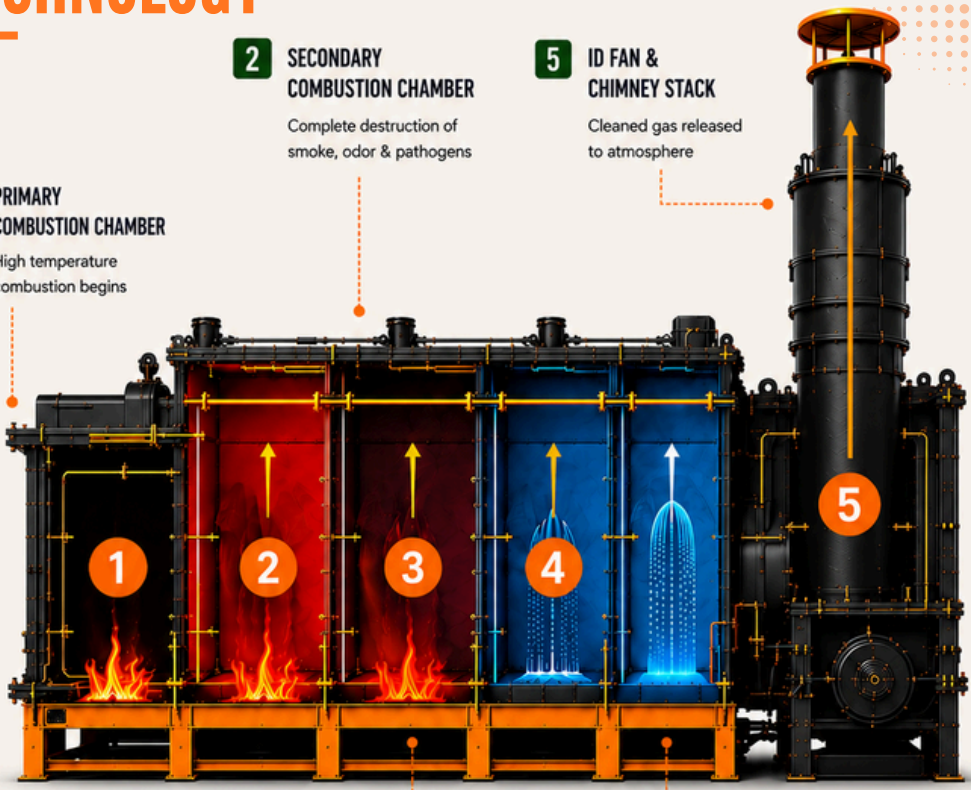
High temperature combustion begins

2 SECONDARY COMBUSTION CHAMBER

Complete destruction of smoke, odor & pathogens

5 ID FAN & CHIMNEY STACK

Cleaned gas released to atmosphere



3 HEAT EXCHANGER CHAMBER

Reduces flue gas temperature

4 WET SCRUBBER CHAMBER

Gas cleaning and pollution control

COMPLETE COMBUSTION

HIGH DESTRUCTION EFFICIENCY

SMOKE & ODOR CONTROL

CLEAN & SAFE EMISSION

ENVIRONIMENT FRIENDLY

CONTINOUS WORKING PROCESS

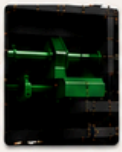
1 WASTE LOADING

Dead animals or solid waste are loaded into the hopper.



2 PUSHING

Hydraulic pusher pushes the waste forward into the primary chamber.



3 PRIMARY COMBUSTION

Waste is burned in primary chamber (850°C – 1100°C) under controlled air supply.



4 SECONDARY COMBUSTION

Gases and smoke are burned at high temperature (1100°C – 1200°C) for complete destruction.



5 HEAT RECOVERY

Heat is recovered through high-efficiency heat exchanger to improve energy utilization.



6 FLUE GAS CLEANING

Flue gases pass through multi-stage cleaning system to remove pollutants, dust & harmful gases.



7 ID FAN & STACK

Cleaned gases are drawn by ID fan and released safely through the stack into the atmosphere.



APPLICATION AREAS

- Municipal Corporations
- Veterinary Hospitals
- Poultry Farms
- Dairy Farms
- Slaughter Houses
- Livestock Institutions
- Government Institutions
- Animal Husbandry
- Veterinary Colleges
- Waste Management Organizations

IDEAL FOR THE DISPOSAL OF



Dead Animals



Poultry Waste



Hatchery Waste



Veterinary Waste



Municipal Waste



Animal By-products & Offal



Meat & Bone Waste



Slaughterhouse Waste

BUILD TO MEET GOVERMENT STANDARDS

- Complies with CPCB Guidelines for Animal Waste Incineration
- Aligned with Solid Waste Management Rules, 2016
- Supports Clean India & Swachh Bharat Abhiyan
- Eligible for State & Central Government Approvals & Subsidies*

*As per applicable policies.

SAFE & HYGIENIC

Complies with CPCB Guidelines for Animal Waste Incineration

HIGH EFFICIENCY

Advanced 5-chamber technology for maximum efficiency

COST EFFECTIVE

Low operating cost with high performance

COMPLIANT SOLUTION

Meets CPCB norms & environmental standards

WHY CHOOSE iRA SYNERGY 2-IN-1?

- High Efficiency Performance
- Advance Emission control
- Robust & Durable Construction
- Cost-Effecive Operation
- Environmentally Responsible
- Easy Maintenance & Long Life
- Automatic & Reliable Operation
- Low Operating Cost

SAFETY FEATURES

Engineered with intelligent safety systems to ensure secure operation, protect personnel, and deliver reliable performance every time.



SAFETY INTERLOCKS

Multiple interlocks ensure safe operation and prevent unintended access.

ALARM SYSTEM

Integrated alarm system alerts operators in case of any abnormality.

TEMPERATURE MONITORING

Continuous real-time monitoring ensures optimal combustion and safety.

AUTO CONTROL SYSTEM

PLC based automation for safe, efficient and unattended operation.

OPERATOR SAFTEY FIRST

Ergonomic design and safety components to ensure operator protection at all times.

CERTIFICATES & COMPLIANCE

Manufactured in accordance with national and international standards to ensure quality, safety, and environmental responsibility.

ISO 9001:2015 · ISO 14001:2015 · ISO 45001:2018 · QUALITY CE CERTIFICATE · NABL · MPCB · CPCB

SUSTAINABLE SOLUTIONS FOR A CLEANER TOMORROW

CLEANER • GREENER • SMARTER

ABOUT US

iRA Synergy Private Limited is committed to delivering innovative and sustainable waste management solutions that protect health, preserve the environment, and build a cleaner tomorrow.



OUR APPROACH

SUSTAINABLE BY DESIGN

Environmentally responsible solutions designed for long-term impact.

SAFE & RELIABLE

Engineered for safety, reliability and consistent performance.

ADVANCED TECHNOLOGY

Innovative technology for efficient and effective waste management.

COST EFFECTIVE

Low operating costs and minimal maintenance for long-term savings.

OUR COMMITMENT

We aim to create a healthier environment through responsible waste management, continuous innovation and a strong commitment to quality, safety and sustainability.

- Clean Environment
- Smart Solutions
- Green Future

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FOLLOW US

Let's work together for a cleaner, greener future.

SCAN TO SEE
our solutions in action